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A Policy for Breeding Laboratory Animals

BY
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THE provision of animals for research has been well reviewed by Paterson (1953) and much detailed information already exists about numbers, sources, uses and the like of laboratory animals in Great Britain (Lane-Petter, 1953a). More recently, Lane-Petter, Barber and King (1955) have surveyed the supply and use of laboratory animals in this country as it was in 1952, and my colleague, Mr. A. A. Tuffery, has added further information (as yet unpublished) about the supply and use of mice. The conclusion arising from these and other observations is that the choice of source and strain of animals of the more commonly used species depends too little on rational considerations and too much on custom, convenience and indifference. Even economic considerations are only rarely invoked, many laboratories having but an incomplete idea of the total cost of their animal departments. Very few can break down their overall cost into animals bought, bred, lost through intercurrent infection and other causes, or simply not used. The keeping of accurate records of incidental losses is by no means universal, and it is still customary (although there are notable exceptions) to leave the care and supervision of the animal department to a junior member of the staff lacking both scientific and technical qualifications.

Fortunately, the exceptions to this deplorable custom are both numerous and successful enough to demonstrate that the animal department can repay the trouble and expense of skilled supervision by saving both money and scientific effort. Neither should it be forgotten that the animals themselves will benefit immediately and automatically by improved methods of housing, breeding, feeding and hygiene: in short, to use Lapage's (1954) happy expression, by fostering "the humane spirit in action."

Preventable waste of animal material occurs through the incidence of infection, which is but one facet of quality although an extremely important one. Nutrition also has been the subject of great advances in recent years, and the many papers by Bruce, Parkes and Short that have appeared in the Cambridge Journal of Hygiene in recent years are too well known to require detailed reference. Housing was the subject of a symposium organised by the Laboratory Animals Bureau in 1954 (L.A.B. Collected Papers **2**). The fact remains, however, that all these recent advances, substantial though they are, have altered very little the general pattern of animal supply. This is not to say that they will not in time have a profound effect, and indeed this is gradually becoming evident. It is important, therefore, to study current trends and to see that they are deliberately guided in the most profitable directions. Although the study of laboratory animals is still in its infancy and has yet to establish its scientific respectability, it has advanced far enough to demand that its future be subjected to critical planning and not left to chance. It is even possible at this stage to indicate the direction which future development might most profitably take.

Present Sources

The Commercial Breeder

At present some two-thirds of the country's guinea-pigs, mice and rabbits come from commercial breeders, a varying proportion of whom are accredited by the Laboratory Animals Bureau. The fraction of other species used in laboratories is much less. The high proportion of the three named species obtained from commercial breeders suggests that these breeders have in the past produced animals of an acceptable standard of quality but, while this may be so in the main, the growing demand for even better animals raises the question of whether this source can continue to satisfy the demand. There is a strong vein of conservatism among commercial

breeders which five years of accreditation have not entirely succeeded in breaking down; and the evidence so far collected shows that traditional methods of laboratory animal breeding will continue to produce animals of current quality so long as laboratories are willing to buy them. To-day, traditional methods are unsuited to the production of animals superior genetically, nutritionally or in freedom from infection, and for the commercial breeder to produce such superior animals would mean a radical reorganisation of his methods.

Many breeders (but by no means all) would undoubtedly have the competence to reorganise to this end, but only at the cost of considerable capital outlay, interruption of production and other financial hazards, which would have to be recouped in higher prices for a better product. Moreover, they would need no small amount of technical guidance, and this would be a direct and irrecoverable charge on one section or another of the user interest.

A critical examination of the contribution made in recent years by the commercial breeder does not, however, condemn him without reservation. A review of the first three years of accreditation (Lane-Petter, 1953) showed that accredited guinea-pigs gave a reasonably good account of themselves and in the survey by Lane-Petter *et al.* (1955) some illuminating comparisons are made. Partly as an outcome of the accreditation scheme, but also as a result of the initiative of individual users, there exist many cases of close co-operation between users and breeders. In return for healthy animals at a reasonable price the laboratory provides general supervision and detailed investigations when necessary; and the breeder as a rule is content to breed to the high standards set and accept no more than a reasonable profit. Such cases of economic symbiosis owe much to the mutual goodwill existing between user and breeder, and both parties benefit from it. There is no reason why the arrangement should not continue at least as long as the personalities in each instance remain unchanged. But much depends on these personalities; it is not a solution universally applicable.

Apart from good individual relations, between breeder and user, there is another requirement for satisfactory dealings with commercial breeders. The breeder supplying one, or at most only a few, laboratories is entirely dependent on them for his market. Since animals take time to breed but, once raised, have virtually no shelf life, the market must be a steady one, and users must give sufficient notice of a change in numbers of animals required. Often this is quite impossible, particularly in the field of research. But when routine investigations or other reasonably predictable requirements make it possible, the placing of long-term orders well in advance of requirements is a mark of consideration for the breeder, commercial or otherwise, that will enable him to give better service to the user.

Laboratory Breeding

In the past the commercial breeders and dealers have been able to sell animals at a figure below that at which laboratories can breed them, often by a factor of two, but in the last two or three years this economic gap has narrowed and will continue to narrow to vanishing point. A few laboratories can already breed mice more cheaply than they can buy them, in spite of the higher overheads inseparable from laboratory breeding; and they are better mice, too. Current work in more than one laboratory also indicates that the laboratory breeding of guinea-pigs need not be so extravagant as it has been and in some places still is, and that better guinea-pigs can be raised in the laboratory at no greater cost than prevails in the commercial market. Rabbit production still favours the commercial breeder, largely owing to the fact that such a high proportion of the cost of raising a rabbit goes in labour, for a satisfactory system of intensive rabbit breeding has yet to be worked out. Indeed, it is the rabbit breeder who, given the proper encouragement, not only can make the most valuable contribution to-day to the supply of excellent animals for laboratory use, but is likely to remain in the field at least for a long time to come.

Laboratory breeding of rats has already gone nearly all the way to extinguishing the commercial breeder, and the same applies to most other species specially bred for laboratory use. Only in the case of cats, dogs, monkeys and frogs is main reliance placed on the commercial supplier, and this because these species are for the most part collected and not bred. This is emphatically not the place to discuss the difficulties of obtaining certain of these species; the prospect of breeding cats, and perhaps also dogs, must, however, to-day be more seriously considered than it has been in the past.

The geographical distribution of commercial breeding is entirely unrelated to the distribution of laboratories requiring animals, and this necessitates transporting animals often over long distances, usually by rail. The transportation by such means of scientific material which is so susceptible to accidental deterioration raises further difficulties, and these are likely to increase with improvements in quality, possibly to a point when it ceases to be feasible.

In view of all these considerations it is not surprising that renewed attention is being directed towards more laboratory breeding. This policy by itself is not a complete answer, but there are enough instances of its successful and economical application to indicate that it deserves further pursuit. Nevertheless, for laboratory breeding to justify itself, it must be given the same consideration as any other important laboratory activity.

At the present time laboratory breeding is mostly resorted to in the following circumstances:—

(1) To produce strains under strict genetical control—*e.g.* inbred strains for genetics, cancer research and some other purposes.

(2) To produce animals with a known nutritional background, or groups of litter-mates, or very young animals, and the like, all of which must be bred where they are to be used.

(3) Many large institutes and research stations and a few universities have found it advantageous to breed most or all of their experimental animals.

(4) Many other laboratories breed some or all of their animals for a variety of reasons, some of which are not very convincing.

The cases where the use of animals is on such a small scale that the cost from whatever source is negligible can be ignored. So too can the idea of the sudden extinction of commercial sources, for any new enterprise for laboratory breeding could not hope to take over all at once the burden at present carried by commercial breeders. Moreover, although there is reputedly no room for sentiment in business, it must not be forgotten that many commercial breeders have served the laboratories well for many years, and although they have made a living out of their business they have usually had to work hard for it and accept financial risks out of proportion to their profits. If these breeders are on the way out, the process can only be gradual, and their presence contemporaneously with the rise of laboratory breeding stations will cushion the adolescence of the latter and at the same time provide a healthy competitive climate for them to grow up in. Indeed, the process of ousting private enterprise may never be complete, and the most enterprising breeders could remain in the field indefinitely. But this does not invalidate the suggestion that the future of laboratory animal production will have to look more and more to breeding stations run by and dependent on laboratories.

Breeding Stations

It is desirable that the distance between the place where animals are bred and the place where they are used should be reasonably short. The use of most animals tends to be concentrated in universities, but exceptions to this are some research institutes, some industrial users (chiefly of mice, but also of other animals) and public health and hospital laboratories (chiefly using guinea-pigs). The demands of large research institutes and industrial laboratories are comparable with those of universities.

For geographical reasons, therefore, a breeding station serving a single university is the ideal; and to this may be added arguments of administrative convenience. University laboratories tend to display wide and often unpredictable fluctuations in their requirements but in a group of laboratories within a single university there will be some buffering of this, the animal producer's constant difficulty. The total requirements of the group will be large enough to justify an adequately trained and skilled staff, with a scientific graduate or veterinarian in charge as curator-superintendent, and a hierarchy of animal technicians some of whom will qualify for responsible technical grades. At the same time the curator would be available to give any assistance required by the constituent laboratories of the group in the care of their animal houses and in other ways.

These suggestions are by no means speculative, for already some universities have established their own breeding stations, and more are planning to do so.

Their usefulness is beyond question and, despite inevitable teething troubles, they seem to be finding favour. Moreover, some large research institutes and industrial organisations have had several years' experience of breeding most or all of their own animals and, even when the cost has been high, the quality of the animals produced has usually made it worth while. Enough information on the subject is already available to enable new projects of this kind to be planned with proper regard to output, flexibility and economy.

Nor is the small diagnostic laboratory a significant bar to the argument, because the intensive production of guinea-pigs is practicable and economical on the sort of scale usually needed by such users, and—fortunately, perhaps—production of good guinea-pigs is not favoured by over-concentration.

As has already been mentioned, a breeding station of the size contemplated would demand the employment of a qualified curator and a number of trained animal technicians. Problems of the breeding and care of laboratory animals—and there is no lack of them—would provide rewarding subjects for investigation, opportunities for which must be available. Although the breeding station could not aspire to departmental status in the university sense, it should have an independent existence of its own, subject only to its purpose of providing departments with their animal needs.

An additional function would be as a training school for animal technicians whose needs, in spite of the growing activities of the Animal Technicians Association, are to-day too often neglected. This function must be accepted as a necessary part of the establishment, for if future research is going to demand better animals it will also demand more highly skilled men and women to breed and care for them.

Lastly, there remains the question of dealing with the fluctuations in supply and demand which are too great for the single breeding station to cope with. Just as some buffering between departments can be effected within a single station, so will it be desirable for there to be some liaison between different breeding stations. The Laboratory Animals Bureau already exists to deal with this problem, and indeed this sort of integration was always envisaged as one of its functions. For so many laboratories it is impossible to forecast exactly what requirements of animals will be, and to attempt to cover all eventualities will mean overbreeding to a wasteful degree. Planned overbreeding to the extent of, say, 10 per cent. will take care of accidents and, with proper integration of breeding stations throughout the country, actual surpluses are likely more often than not to find a user.

Conclusions and Summary

How to ensure a satisfactory supply of laboratory animals is a problem familiar to most experimental biologists, but its solution has in the past too often depended, for lack of reliable information, on irrelevant considerations or on no considerations at all. To-day, lack of information can no longer be made the excuse for not planning the economic provision of animals of the right quality and characteristics. When almost any strain of animal with a tolerable survival rate under laboratory conditions would suffice, it was natural that the commercial breeder should play an important part in their supply. On those terms he was able to compete successfully with laboratories attempting to breed similar animals. But with the rising demand for animals of better quality or specific characteristics, often genetically controlled, the limitations of the commercial breeder have become apparent. The animals demanded by the laboratories of to-day and to-morrow are beyond the capacity of most commercial breeders to produce, at least without radical reorganisation of their methods, and such reorganisation will have to be paid for in higher selling prices and more reliance on scientific supervision.

There are signs that the importance of the commercial breeder in this country is declining but his exodus will be gradual and perhaps never complete. There is, however, a growing need for laboratory breeding, and this is best contemplated in terms of breeding stations serving a university, large research institute or comparable organisation; big enough to justify employing qualified scientific and technical staff, but local enough to avoid difficulties of geography. Such stations, apart from serving the needs of their own group of laboratories, would be suitable centres for investigating the many pressing problems of laboratory animal husbandry and for the training of animal technicians. Properly constituted, they should be able to supply animals of better quality than many that are used to-day, so that their cost will be partly offset by the value of work demanding improved quality; and there is no reason why they should not in time altogether overcome the economic disadvantages to which laboratory breeding has hitherto been subject in relation to commercial breeding.

It should be accepted as an essential part of a policy of establishing new breeding stations, or encouraging those already in existance, that, at least for the purpose of finding a user for surplus animals, they should look to a central body for exchange of information about demand and availability of animals. The central body best fitted for this purpose is the Laboratory Animals Bureau.

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A Case of Leukaemia in a Pig

BY

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CASES of leukaemia in the pig are rare. According to Udall, the condition is discovered by the Federal Meat Inspection Service in about one pig in 220,000, and only occasionally have cases been described. It seems possible, however, that it causes a larger number of deaths than is suggested by the records which show a definite diagnosis of the condition.

Subject.—A Large White hog pig aged about five months.

History.—The pig had been vaguely ill for about a week before advice was sought and had been partially off his food. He had been losing condition rapidly over the last fortnight. The rest of the pen were in good health. The pigs were fed on a proprietary mash.

Symptoms

Advice was sought on July 12th, 1955. The pig was found to be in poor condition with a general pallor and lack of bloom to the skin; he had difficulty in getting up and walked with an unsteady gait. The faeces were very hard. His temperature was 104·2° F., while respirations and heart sounds were normal. His appetite was not completely lost and a small amount of green food was eaten.

An injection of penicillin was given.

At a re-examination on the following day the pig's condition was found to have deteriorated and jaundice of the conjunctiva was noted. The temperature was still 104·2 °F. A poor prognosis was given, but the pig was considered not to be worth a casualty slaughter.

Post-mortem Examination

The pig died on July 15th, 1955, and a *post-mortem* examination revealed a greatly enlarged spleen and liver. All the lymph nodes which were examined, including the parotid, submaxillary, mediastinal, and mesenteric nodes, were enlarged. The splenic pulp was pale and homogenous. The liver contained well-defined pale areas around the lobules. The kidneys contained small darker areas. Apart from a few petechial haemorrhages on the pericardium, the heart and lungs were macroscopically normal.

Diagnosis.—A tentative diagnosis of leukaemia was made.

Histological Report

Histological examination revealed the following conditions:—

Kidney.—There was extensive interstitial cellular infiltration of a diffuse nature, and a number of nodules in which almost all the normal kidney tissue had disappeared. The infiltrating cells were variable in size, with somewhat irregular nuclei and a mod-

crate zone of cytoplasm. Many of the nuclei contained from one to three nucleoli. Mitotic figures were numerous. Very few blood vessels were present in the nodules. At the margins of nodules, cells were infiltrating between the kidney elements and leading to their necrosis.

Liver.—This was extensively infiltrated, only islands of liver cells surviving in the midst of neoplastic tissue. The hepatic cells showed cloudy swelling and fatty changes, and bile thrombi were present in many of the canaliculi. The sinusoids were congested.

The infiltrating cells were the same as in the kidney, but many of them were showing necrobiotic changes.

Spleen.—There was no distinction between the red and white pulps. The tissue consisted of a mass of cells, similar to those in the kidney, and in addition reticulum cells and multinucleate giant cells were present.

Lymph node.—There was no division into cortex and medulla, and no germinal centres were observed. The whole of the section consisted of the cellular tissue previously described.

Pancreas.—This was very heavily infiltrated with neoplastic cells. The small areas of surviving pancreatic tissue showed autolytic changes.

The histological findings and the distribution of the lesions indicated that the condition was a lymphatic leukaemia.

Acknowledgments.—I should like to thank Mr. H. P. Harding, M.R.C.V.S., of the Veterinary Pathology Department, The University of Liverpool, for the histological examination and report, and Mr. S. J. Rennix, M.R.C.V.S., of Stone, for his interest and permission to publish this work.

Reference

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MOVE TO LIMIT INDIAN MONKEY EXPORTS

A deputation from the R.S.P.C.A. Council was received in London by the High Commissioner for India, Mrs. Pandit, and urged that the export from India of monkeys for experimental purposes and of wild birds should be banned. The society said afterwards that figures compiled by the R.S.P.C.A. showed that about 500,000 wild birds had been exported from the Far East *via* London for sale in Europe.

The High Commissioner promised to transmit the information for consideration by the Government of India, it was stated.

A Note on the Use of the Micro Complement Fixation Reaction in the Diagnosis of Canine Virus Hepatitis (Rubarth's Disease)

BY

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IN the case of a small dog the amount of blood which can be withdrawn is often insufficient for the routine complement fixation test for canine hepatitis virus antibody, and it certainly allows of no repetition. Because of this it was decided to see whether the test as used in this laboratory (Larin, 1951) would give reliable results if each of the components was reduced five times in amount, the wells of a perspex haemagglutination plate,* covered with a glass sheet, being used instead of test-tubes. The results were not entirely satisfactory in the preliminary tests, where no other factor was varied, the components being prepared as for the routine complement fixation test-tube test, and it was only after varying the amount of haemolytic amboceptor, the percentage of sheep red blood cells, the temperature and the time of incubation, in turn, that a satisfactory test was evolved.

The optimum conditions for the micro test were as follows:—

1. Haemolytic system contained 2 per cent. sheep red blood cells.

2. Incubation temperature was 40° C.

3. Incubation time of both phases of the test was 40 minutes.

In other respects the conditions of the micro test were similar to those previously described for the macro (test-tube) test (Larin, 1951).

Results were recorded as follows:—

Positive

Complete inhibition of haemolysis (++++)
75 per cent. ... ... (+++)
50 ,, ,, ... (++)
10 ,, ,, ... (+)

Doubtful

5 per cent. inhibition of haemolysis (±)

Negative

Complete haemolysis (0)

Degree of Correlation of Readings

Using the above conditions for the micro reaction, and the usual ones for the macro reaction, parallel tests were set using 61 sera at our disposal. The sera were of sufficient amount for both tests to be carried out each in the presence of complement ranging from 4·5 to 1 per cent. (the reduction by 0.5 per cent.).

* Messrs. Prestware Ltd., Lombard Road, Merton, London, S.W.19.

(*Continued at foot of col. 1 overleaf*)

The Use of ACTH in the Treatment of Some Skin Conditions in Small Animals—Three Case Reports

BY
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ALTHOUGH cortisone and ACTH have been used extensively in many diseases met with in human dermatology, there are few accounts of its use in animal skin diseases. The following reports may therefore be of interest.

Miliary Eczema (so-called "Fish Eczema") in the Cat

This term is used to describe that pruritic condition of the cat's skin which appears first on the dorsal aspect of the root of the tail and then spreads along the mid line anteriorly until it reaches a point about level with the last thoracic vertebra. In severe cases it occurs around the anus and on the posterior aspect of the thighs. These areas are those which the cat can reach with the tongue but on rare occasions lesions appear in the neck region which are slightly different because they are caused by the scratching action of the cat's hind leg.

Constant licking causes breaking of the hairs which become bristly. The skin becomes abraded with many tiny lesions which exude serum and this gives the back a shiny appearance; sometimes there is black pigmentation of the skin. The condition appears mainly in castrates of both sexes.

The subject of the present report was a four-year-old, fairly fat, neutered queen. It had had attacks of miliary eczema each year round about early summer and on this occasion the condition had persisted for two months in spite of dietary changes and topical sedative applications of calamine lotion and similar treatments. The treatment and progress were as follows:—

Day 1. Five units ACTH.

Day 2. There was a marked clinical improvement and an associated improvement in the cat's general health and appetite. Five units ACTH.

Day 3. Improvement was remarkable. The pruritis had ceased and the animal appeared normal except for the absence of hair.

The improvement in the animal was maintained and the hair grew normally in due course.

Six other cases of miliary eczema were treated similarly with almost identical results, although varying amounts of ACTH were required. One severe case required 10 units on alternate days with a total of 60 units.

"Eczema" in the Dog

Subject.

Six-year-old Wire-haired Terrier bitch. Since whelping 21 months previously, a patch of "eczema" had been present at the base of the tail and it had resisted all forms of treatment. The lesion had varied in extent and in intensity. When ACTH treatment was first applied the lesion was two and a half inches in diameter and included the entire base of the tail together with the skin dorsal to the anus. It was bright red in colour and hot to the touch. It was moist both from exudation and from the animal's constant licking.

(*Continued from previous page*)

The results were as follows, the macro (test-tube) test being taken as standard:—

Macro (test-tube) complement fixation reaction		Micro (plate) complement fixation reaction		
Result	Number of Sera	Positive	Negative	Doubtful
Positive	29	27	–	2
Negative	26	–	25	1
Doubtful	6	–	4	2

Sera which were anticomplementary have not been included in this table, although results in the plates corresponded with those in tubes.

It can be seen from the above table that, although the readings did not correspond exactly in the macro (test-tube) and micro (plate) tests, there still was fairly close correlation between the results on a "positive," "negative," and "doubtful" basis. Results on this basis can be read at a glance in the micro (plate) test, though in this series the percentage of haemolysis at each level of complement was recorded for accurate comparison with the corresponding tube.

Although the micro (plate) test cannot replace the macro (test-tube) test in research where haemolysis must be estimated more accurately it is considered to be useful in diagnostic work, and, especially, as a screening test when a number of canine sera are submitted for examinations for the presence of canine hepatitis virus antibody.

Acknowledgments.—This work was carried out under the constant guidance and encouragement of Dr. N. M. Larin to whom we are grateful.

Our thanks are also due to Mr. S. F. J. Hodgman for giving his permission to one of us (B. F. Smith) to take part in this work.

Reference

LARIN, N. M., *Nature*, **168**. 745.

Treatment and Progress.

Day 1. 10 units ACTH.

Day 3. Less inflamed and irritable than previously. 10 units ACTH.

Day 5. Progress continued. Pruritis almost absent. 10 units ACTH.

Day 7. A fresh patch of exudation had appeared. 20 units ACTH.

Day 9. Fresh lesion still giving trouble.

Day 12. Owner reported a complete cure.

Day 19. Return of some inflammation and pruritis. 30 units ACTH.

Day 26. 20 units ACTH and 10 grains desiccated anterior pituitary gland by mouth.

Day 33. Skin nearly normal. Five units of ACTH were given on four successive occasions of weekly intervals.

For 10 months following this treatment the animal remained normal. She became healthier, lost much superfluous fat and became livelier.

Two very similar cases have been treated in much the same way. A Sealyham Terrier with milder symptoms required only three injections of 20 units of ACTH at three-day intervals. In another case slightly more was necessary.

Pruritis and Dermatitis in the Dog

Subject.

Scotch Terrier dog, three and a half years old.

This animal had suffered with eczematous conditions on various parts of the body for about 18 months. It now had lesions inside the thigh, the posterior part of the abdomen, prepuce, scrotum and inner aspect of the left ear. The skin in the groin was grossly thickened and in folds. It was greasy and pigmented.

Treatment consisted of five units ACTH following which there was improvement within three days. During the next 40 days eight injections of five units of ACTH were given and the animal made a complete recovery even before the last two injections were given. The skin lost its pigmentation and thickening and returned to normal in a remarkable way.

It is to be hoped that these case reports, though inconclusive, will stimulate some correspondence regarding both the theory and the practical uses of this hormone.

Acknowledgment.—I should like to acknowledge the assistance given by Dr. W. Tindall of Organon Laboratories Ltd., the kindness of Organon Laboratories Ltd., in supplying " Cortrophin Z " long action ACTH, and the help and advice given to me by Professor N. J. Scorgie.

Report

Third Annual Report. International Bureau for Epizootic Diseases, 1954. Muguga, P.O. Kikuyu, Kenya.

This Third Annual Report shows how useful the Inter-African Bureau has become during its first three full years' activity. The Bureau is located at Muguga in Kenya, and the staff for the first three years has consisted of a Director, Mr. W. G. Beaton, M.R.C.V.S., D.V.S.M., a Secretary/Translator, and three juniors. An Assistant Director was to be appointed early in 1955. The Bureau is governed by a Council of Management, consisting of not more than two members nominated by each of the six Governments participating, viz., Belgium, France, Portugal, the Federation of Rhodesia and Nyasaland, the Union of South Africa, and the United Kingdom.

An Advisory Committee on Epizootic Diseases in Africa was established, and held its first meeting in July, 1954. This gives an opportunity for representatives from all parts of Africa to consider matters of mutual interest on the control of the various important epizootic diseases.

Although the staff of the Bureau is small, it has done a good deal of work in collecting information and building up a reference bibliography. It distributes its information in the form of a Quarterly Survey of Animal Health Statistics, a Quarterly Bulletin of Epizootic Diseases of Africa, Weekly Information Leaflets, and replies to individual enquiries.

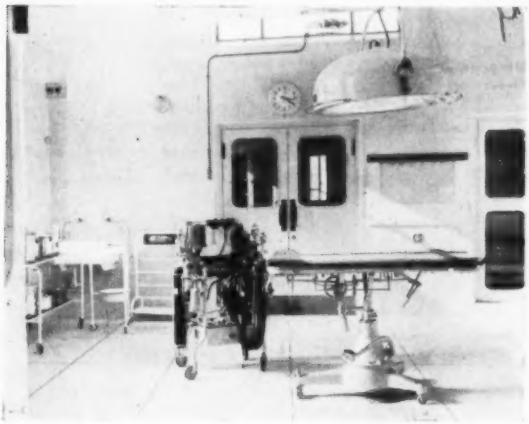
The Bulletin of Epizootic Diseases in Africa is a quarterly scientific periodical, the first number of which was published in March, 1953. It has already become a valuable journal, and it must fill a very great need, particularly for the Colonial veterinary official. The journal is well printed and presented, and it is published in both English and French. It has presented a number of interesting scientific articles, reviews of Annual Reports of the various territories, and has presented an illustrated series of articles on the veterinary research centres in Africa. The Bulletin publishes from time to time biographical notes on the various veterinary personalities in the African territories, and there is also a useful Abstracts section. Altogether it is a most useful journal, and Mr. Beaton is to be congratulated on its development.

The African continent has its own peculiar problems, and there has always been a great need for active collaboration between the Veterinary Departments in all the African territories, both English and French speaking. The Inter-African Bureau should do a great deal to further that collaboration, and should make an effective contribution towards the solving of African veterinary problems.

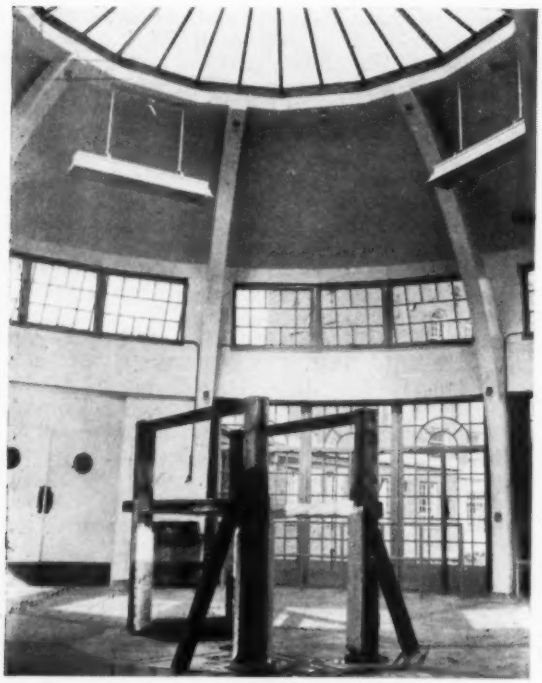
It is regretted that owing to pressure on our space the Current Literature feature has been omitted from this issue. It will be published next week, and will include a review of Experiments in Progress, No. 7, as carried out by the Grassland Research Institute.

The New Veterinary School at Cambridge

The pictures on this page illustrate some of the teaching and research departments of the new School. The building was designed by Ian Forbes, F.R.I.B.A., and it is clear that the equipment and facilities are comparable to the high quality of the whole. We are indebted to *Sport & Country* for permission to reproduce these photographs, the details of which are as follows:—

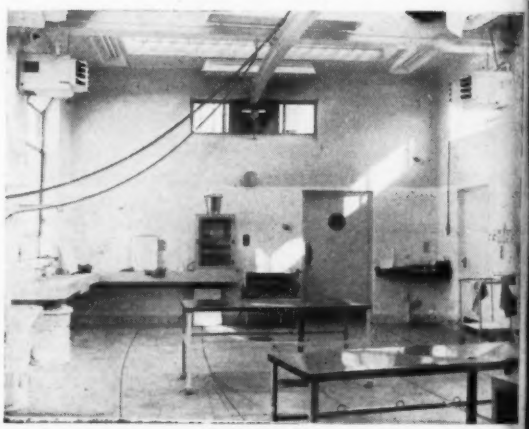


The operating theatre for small animals, showing in the foreground the anaesthetics trolley and the table.



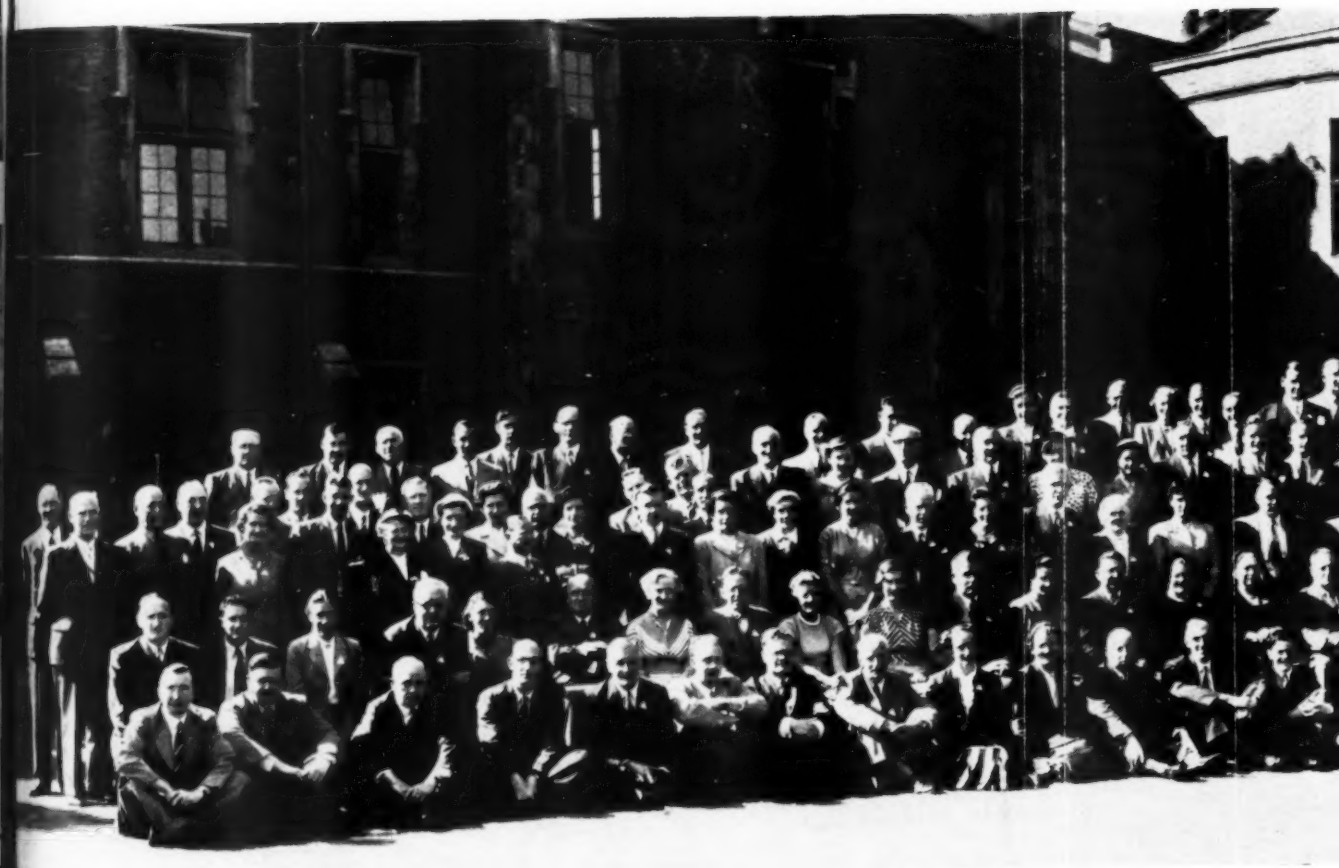
The interior of the Rotunda. The stocks used for the restraint of large animals are shown, while in the background of the picture will be noted the railings behind which the students stand to watch demonstrations.

One of the laboratories.



In the *post-mortem* room the overhead rail which is provided so that an electric hoist may be used is a feature of note.

In the operating theatre for large animals the surgical bed may be noted. Cases from veterinary surgeons in private practice are referred to the hospital.



BRITISH VETERINARY ASSOCIATION, ANN

ITISH VETERINARY ASSOCIATION, ANNUAL CONGRESS, BELFAST, SEPTEMBER, 1955

55

1955

The 1955 Congress

Attendance List

S. G. Abbott (Glasgow), J. A. Adams (Omagh), Dr. F. Alexander (Edinburgh), D. Allen (Armagh), Mr. and Mrs. C. G. Allen (Birmingham), Mr. and Mrs. T. H. Allen (Lurgan), Professor E. C. Amoroso (London), J. A. Anderson (Brentwood), Mr. and Mrs. K. P. Anderson (Stirling), Mr. and Mrs. D. Archibald (Conon Bridge), Dr. H. Baggerud (Oslo), Councillor Bailey (Manchester), J. S. Baird (Lisburn), Mr. and Mrs. A. Barclay (Banbridge), K. C. Barnett (Lytham St. Annes), Mr. and Mrs. J. Barr (Penrith), S. Barrett (High Wycombe), J. Barron (Dailly, Ayrshire), Mr., Mrs. and Miss Barton (Brentwood), Professor R. F. Baskett (Belfast), P. D. Baylis (Buenos Aires), Mr. and Mrs. J. T. Baxter (Belfast), H. Begg (Stranraer), Mr. and Mrs. N. M. Black (Nottingham), Mr. and Mrs. P. S. Blackburn (Ayr), Dr. W. P. Blount (Stoke Mandeville), Professor G. F. Boddie (Edinburgh), S. R. Bolton (Cookstown), M. Boyce (Bangor, N.I.), Mr. and Mrs. N. Boyd (Dungannon), Miss W. M. Brancker (Sutton Coldfield), A. D. J. Brennan (London), C. C. Brown (Dublin), James A. Brown (Invergordon) Miss Nora A. Brown (Glasgow), S. Brown (Ballymoney), Professor and Mrs. T. G. Browne (Dublin), Mr. & Mrs. W. E. Bryson (Belfast), W. A. Burns (Glasgow), Mr. and Mrs. M. J. Byrne (Dublin), Mr. and Mrs. H. E. Bywater (London), E. R. Callender (Lytham St. Annes), C. W. Cartwright (Dyserth), Mr. and Mrs. R. W. Cassells (Newtownards), Colonel H. J. Cator (Norfolk), W. R. Chapman (Coleraine), Mr. and Mrs. A. S. Chapman (Stirling), T. E. Christie (Belfast), Mr. and Mrs. A. R. L. Clark (Belfast), Mr. and Mrs. H. A. Clay (Framlingham), Mr. and Mrs. S. V. Collard (Warwick), N. C. Collins (London), Mrs. and Mrs. R. J. Cooper (Cookstown), Colonel L. W. Coulden (Droitwich), Mr. and Mrs. G. D. Coward (Kendal), Mr. and Mrs. G. J. Crawford (Settle), Mr. and Mrs. M. Crawford (Weybridge), Miss I. Crooks (Coleraine), F. A. Crowhurst (Maidenhead), R. G. Dalton (Glasgow), O. K. Devlin (Coalisland), Professor J. M. Dimic (Belgrade), K. Downham (Cirencester), W. Downing (Berkhamstead), Mr. and Mrs. R. H. Duff (Lasswade), Mr. and Mrs. W. Duncan (Belfast), F. Dunlop (Carlisle), K. M. Dyce (London), Dr. A. T. Elder (Belfast), R . G. English (Belfast), Mr. and Mrs. G. A. Ewing (Antrim), Mr. and Mrs. C. M. Ferguson (Kirkcaldy), H. N. Ferguson (Newtownards), Mr. and Mrs. H. I. Field (Cambridge), Master and Miss Field, R. C. U. Fisher (Farnborough), Mr. and Mrs. W. E. Fletcher (Newry, Co. Down), Dr. A. Foggie (Edinburgh), Mr. and Mrs. W. Forgrave (Wrexham), Mr. and Mrs. J. Forster (Stranraer), Mr. and Mrs. A. M. Fulton and Miss Fulton (British Guiana), Mr. and Mrs. J. Geary (Kendal), Mr. and Mrs. T. C. Geary (Larne), H. Gillmor and Miss Gillmor (Ayr), Mr. and Mrs. R. F. Girvan (Larne), Mrs. D. Glover (London), Mr. and Mrs. T. N. Gold (Redditch), Mr. and Mrs. W. A. M. Gordon (Belfast), G. N. Gould (Southampton), S. Gourley (Brighton), James M. Gourley (Ashton-under-Lyne), P. Gourley (Dublin), Mr. and Mrs. J. F. Gracey (Belfast), Mr. and Mrs. A. M. Grant (Kendal), J. C. Grant (Aberdeen).

Mr. and Mrs. D. C. Greene (Belfast), Dr. and Mrs. A. Greig (Glasgow), R. B. Griffiths (Liverpool), W. P. Gronow (Bridgend), T. W. Groves (Wilmslow), Councillor W. Groves (Cardiff), Dr. and Mrs. C. Grunsell (Edinburgh), L. W. Hall (Cambridge), J. A. Hammond (Norfolk), Mr. and Mrs. H. E. Harbour (St. Albans), P. Harnett (Dublin), Mr. and Mrs. W. O. Harper (Comber, Co. Down), G. W. Harris (Ballymoney), W. T. Harrow (Wilmslow), F. S. Hart (Enniskillen), Mr. and Mrs. D. S. Hathorn (Stranraer), Mr. and Mrs. M. B. Hawksley (London), R. N. Hazarika (India), Mr. and Mrs. G. B. S. Heath (Penrith), J. Heney (Cookstown), G. N. Henderson (London), Mr. and Mrs. H. R. Hewetson (Southport), C. J. Hewlett (London), Major-Gen. R. K. Hezlett (Aghadowey), S. L. Hignett (Frant), Mr. and Mrs. P. Hildebrand (Lurgan), Councillor H. P. J. Hinderer (Manchester), Mr. and Mrs. R. D. Hodgins (Limerick), Mr. and Mrs. J. H. M. Hughes and Misses S. and A. Hughes (Cardiff), T. W. Hughes (Mold), Mr. and Mrs. J. N. Hunniford (Portadown), Mr. and Mrs. H. L. Hutchinson (Belfast), M. G. Hynes (Dublin), Mr. and Mrs. J. S. S. Inglis (Glasgow), Mr. and Mrs. J. M. Ingram (Oxted), Mr. and Mrs. S. A. Irwin (Lurgan), Mr. and Mrs. S. Jennings (Glasgow), B. V. Jones (London), Mr. and Mrs. E. Jones (Caernavon), O. G. Jones (London), W. G. Jones (Atherstone), Mr. and Mrs. W. O. Jones (Bettws-y-Coed), W. J. Jordan (Wrexham), Mr. and Mrs. H. C. I. Kelly (Bangor, N.I.), Mrs. K. G. R. Kelly (Gayton), Mr. and Mrs. W. H. B. Kelly (Cookstown), Dr. and Mrs. W. R. Kerr (Belfast), G. F. Kershaw (Newmarket), J. O. L. King (Liverpool), Miss M. Knapton (Wrexham), Professor and Mrs. H. G. Lamont (Belfast), P. H. Lamont (Belfast), Lt.-Col. N. A. Lasher (U.S.A.), F. B. Leech (Harpenden), J. A. Leslie (London), E. W. Little (Dublin), Dr. and Mrs. D. Luke (Belfast), Mr. and Mrs. T. Lyness (Ballymena), P. J. Lyons (Navan, Co. Meath), W. B. McAleer (Dublin), J. W. Macaulay (Kenya), P. S. McBride (Antrim), P. J. McCarroll (Cardonagh), D. F. McCarthy (Dublin), Mr. and Mrs. W. D. J. McCartney (Belfast), Mr. and Mrs. C. T. McCrea (Winchester), Mr. and Mrs. J. G. McCrea (Omagh), Mr. and Mrs. R. McCrea (Strabane), Dr. R. J. McClenaghan (Ottawa), Mr. and Mrs. H. L. McConnell (Belfast), M. R. S. McCullough (Dungannon), Mr. and Mrs. W. H. McCully (Cookstown), B. A. McErlean (Dublin), A. M. McFerran (Scarborough), Professor P. A. McGeady (Dublin), Mr. and Mrs. R. E. McGrath (Paisley), Mr. and Mrs. W. J. McIlroy (Oxton), M. McKaye (Birmingham), Mr. and Mrs. and Miss McKellar (Derby), D. McKelvey (Lisburn), Mr. and Mrs. J. Mackinnon (Lockerbie), Miss Mackintosh (Edinburgh), Mr. and Mrs. R. D. Mackintosh (Huntly), H. K. McLachlan (Stranraer), Mr. and Mrs. A. McLean (Belfast), W. G. McLeod (Stranraer), Mr. and Mrs. D. McManus (Belfast), Mr. and Mrs. F. H. McMillen (Belfast), Dr. and Mrs. T. McNabb (Belfast), Mr. and Mrs. G. K. McNally (Portadown), Mr. and Mrs. R. R. Macrae (Perth), Mr. and Mrs. H. G. McShane and Miss R. A. McShane (Chelmsford), D. McVeigh (Cookstown).

Mr. and Mrs. and Miss Barton Mann (Weyhill, Hants), Dr. A. Marr (Sevenoaks), Mr. and Mrs. D. R. Marshall (Coleraine), Mr. and Mrs. J. Marshall (Barnsley), J. V. Marshall (Co. Meath), J. A. Matheson (Atherstone), N. H. Mathieson (Greenford), Mr. and Mrs. R. Maybin (Ballymena), D. W. Menzies (Bristol), Dr. and Mrs. C. K. Mingle (Washington), Professor and Mrs. W. Mitchell (Edinburgh), R. Moore (Belfast), Dr. R. F. Montgomerie (Beckenham), F. Morgan (Magherfelt), W. T. Morrow (Belfast), W. R. M. Morton (Belfast), Professor M. Moskoff (Sofia), Professor and Mrs. L. C. Moss (Colorado), Mrs. S. J. Motton (Penzance), R. B. T. Munro (Preston), J. M. Murphy (Dublin), Councillor and Mrs. W. Murray (Manchester), R. H. Neill (Belfast), Dr. Woldike Neilson (Copenhagen), I. Newsam (Cambridge), T. J. Newsam (Newcastle, N.I.), Professor J. A. Nicholson (Dublin), K. Nixon (Nigeria), E. de Nooy (Holland), J. P. Nowlan (Dublin), Mr. and Mrs. W. G. R. Oates (London), Mr. and Mrs. J. S. Ogg (Belfast), Dr. L. B. O'Moore and Miss E. O'Moore (Dublin), D. E. Orr (Manchester), R. Paisley (London), C. B. Paul (Co. Derry), Dr. and Mrs. J. K. L. Pearson (Belfast), R. Phillips (Sussex), Capt. and Mrs. R. N. Phillips (Ipswich), Dr. A. T. Phillipson (Aberdeen), J. Plendereith (Birkenhead), N. F. Pollock (Norfolk), W. A. Pool (Surbiton), A. Pottie (Paisley), S. A. Price (Tadworth), F. G. Proctor (Preston), R. J. Pugh (Harrow), Mr. and Mrs. J. Rankin (Belfast), T. Y. Ranson (Dungannon), A. Reid (Castle Douglas), James Reid (Edinburgh), N. R. Reid (Rome), Mr. and Mrs. J. N. Ritchie and Miss Ritchie (London), Professor and Mrs. A. Robertson (Edinburgh), Bailie G. Robertson (Glasgow), Mr. and Mrs. L. F. Robertson (Tanganyika), T. H. Robinson (Newtownards), W. J. B. Robson (Laurencekirk), Mr. and Mrs. J. E. Rosborough and A. Rosborough (Belfast), Mr. and Mrs. R. F. Ross (Bishopbriggs), Dr. J. M. Ross (London), Dr. Scott Russell (Oxford), Dr. D. W. Sainsbury (London), Dr. R. Scarisbrick (Cambridge), R. Scoular (Portsmouth), A. R. Semple (Annan), Mr. and Mrs. P. L. Shanks (Aberdeen), Mr. and Mrs. D. R. Shaw (Port Stewart), Mrs. M. Sheppard (London), Colonel and Mrs. G. V. Short and Miss C. Short (Wilmslow), Councillor F. Siddall (Manchester), Mr. and Mrs. M. J. Sim (Coleraine), R. Simmons (London), Mr. and Mrs. I. Simms (Lisburn),

H. H. Skinner (Pirbright), Mr. and Mrs. J. G. Souter (Dundee), G. F. Smith (Beccles), Mr. and Mrs. R. M. Smith (Galston, Ayr), R. Trow Smith (London), W. G. Smyth (Lisburn), A. Spreull (Dundee), Dr. A. W. Stableforth (Weybridge), Mr. and Mrs. T. Steele (Lisburn), Mr. and Mrs. J. A. Stephenson (Dungannon), G. H. G. Stewart (Crumlin), E. W. Sullivan (Belfast), H. Sumner (Liverpool), R. Swaby (Gainsborough), Mr. and Mrs. J. M. Swanney (Perth), Dr. E. L. Taylor (Weybridge), J. C. Taylor (Beccles), J. D. Taylor (Uganda).

Mr. and Mrs. J. H. Taylor (London), Mr. and Mrs. R. R. Temple (Tanganyika), Mr. and Mrs. J. Thompson (Belfast), W. J. Thompson (Coleraine), Mr. and Mrs. A. Thomson (Glasgow), H. Thornton (Newcastle upon Tyne), Mr. and Mrs. L. N. Thornton (Australia), J. F. Timoney (Dublin), D. J. Tweed (Belfast), W. M. Tweed (Chester), Miss O. Uvarov (Cobham), K. L. Vaughan (Liverpool), R. Vujovic (Belgrade), A. R. Waddell (Stranooden), Mr. and Mrs. A. L. Walther (London), J. K. Walley (Knutsford), Sir Frank Ware (London), J. McW. Ware (Chester), C. Waterhouse (Southport), T. Watkins (London), C. Watson Haverfordwest), Miss B. Weaver (London), W. J. Webb, W. M. Webster (New Zealand), D. M. Weigh (Cookstown), Mr. and Mrs. R. F. West (London), B. Weston (Derby), Major J. H. Wilkins (Aldershot), Mr. and Mrs. E. Wilkinson and J. Wilkinson (Derby), G. T. Williamson (New Zealand), Mr. and Mrs. A. L. Wilson (Ayr), H. M. Wilson (Cupar-Fife), Mr. and Mrs. J. E. Wilson (Lasswade), W. J. Wilson (Ballyclare), Dr. F. W. Withers (Weybridge), Mr. and Mrs. F. E. Wolfe (Co. Cork), Mr. and Mrs. J. C. Wood (Berkhamsted), A. N. Worden (Huntingdon), A. J. Wright (Macclesfield), Michael Wright (Macclesfield).

Past President of the R.C.V.S. Honoured

Portrait of Mr. H. W. Dawes Accepted

On Friday, October 14th, there took place at 9-10 Red Lion Square the ceremony of the acceptance by the Royal College of a portrait of Mr. Howard W. Dawes painted by Mr. Arnold Mason, R.A. This portrait had been commissioned by the Council of the Royal College on Mr. Dawes's retirement from the Council, in recognition of his services to the profession as President during the period 1946-9 which saw the passing of the Veterinary Surgeons Act.

The ceremony took place in the Members' Common Room at the College where the portrait now hangs.

There were present Mr. and Mrs. H. W. Dawes, Mr. Arnold Mason, R.A., Dr. Gilles de Kock, a member of the Royal College, an Honorary Associate and a contemporary of Mr. Dawes, the members of the Council, R.C.V.S., Mr. R. V. Thatcher, Solicitor to the College, and the principal staff of the College.

In accepting the portrait the President (Mr. H. Sumner) said:—

"If any place be the repository of the history and the traditions of our profession it is within these walls. In it we cherish the records and the history of our past, we hold those of the present, and we work and strive to mould the future. On the walls are the names and the portraits of many notable servants of this College who have gone before, and to-day we are to add to that number the portrait of one who, by his service to the College and his own personal attributes, is a worthy member of that illustrious circle.

"It gives me great personal pleasure because I can claim to be a personal friend of Mr. Dawes and a colleague over a number of years.

"It fell to you, Sir, to assume the high office of President during a momentous period, and your colleagues were so impressed by your conduct of the affairs of the College that they re-elected you on two occasions. The times were, perhaps, not troublous, but they were anxious in so far as they covered the time of the implementation of the Loveday Committee's proposals into the Veterinary Surgeons Act of 1948, as we know it now. It is a fact that you were not alone in your doubts and misgivings as to the provisions of that Act.

"As President, Vice-President, and as an ordinary member of Council it has been my pleasure and privilege to observe the happenings in veterinary education as it is at present established in this country, and I feel sure it would do your heart good to see it. Without any qualification it can be stated that our doubts and misgivings have by time been proved to be well-judged but ill-founded. The condition of veterinary education in this country at the present time is such as to justify the most confident and the highest hopes for the future of our profession. In that state it may well be that you cannot claim to have been the architect, but at the same time you can claim to have been a builder, and if you could but see it I feel sure you would be well pleased with your work. At the same time you still remain, as always, an ornament to the one-portal system.

"From Denston School you proceeded to the Royal Veterinary College, where your behaviour was positively staggering, in so far as your collection of prizes tends towards the vulgarity! It is on record that you amassed a total of 20 class prizes, the Royal Agricultural Society's prize, the Walley Memorial Prize and, to cap it all, you obtained the Blue Riband of student attainments by gaining the FitzWygram Prize, which puts the hall-mark of quality on you at that early time. There was another indiscretion at that period, Sir, in so far as you passed the final examination before you reached the age of 21.

"After qualifying you had the advantage of joining the practice of one of the great figures of the north, Joseph Abson of Sheffield, a Past President of this Royal College. When you returned from war service you joined your father at West Bromwich, where you still carry on the name and reputation that was handed to you. Between that time and this there is just a succession of associations, professional and non-professional, in which you have added lustre not only to yourself but to the profession. To name but a few, there is your long association with the Royal Agricultural Society of England, your association with various breed societies and, further, that epic work of observation which you did with your old friend, Major Brennan de Vine, on the assessment of the

dentition of the pig, which stands as true to-day as it did when you conceived it.

"In another field you have been associated with the Royal Sanitary Institute and for a period you gave them the benefit of your services as an Examiner in Meat Inspection. The name of Howard Dawes is now, and for many years past has been, closely associated with the Hackney Horse Society, and you are an esteemed and a much sought-after judge at many shows. In another aspect of the sporting world you are a Steward of the Greyhound Racing Club, and it is to your credit that not only in Birmingham but also at headquarters you have made notable contributions to the work of the Royal Society for the Prevention of Cruelty to Animals, and no doubt have been of material assistance in trying to keep that Society with its feet on the ground.

"There is another field in which you have served quietly and without publicity, and that is in your contribution through your membership of the subcommittee that deals specifically with veterinary education via the University Grants Committee.

"In your main professional life you have held many offices. You followed your father as President of the Midland Counties Veterinary Association, and also for a long period held the thankless job of Secretary. In addition you were for long a member of the Council of the British Veterinary Association, and in addition we all know your close interest in, and long service to, the Victoria Benevolent Association.

"Lastly, I come to your service to this Royal College. You were a member of the Council from 1934 until 1953, when you ceased to be a member under circumstances which we all regret. You were, over a long period, a most assiduous and helpful Chairman of the Examination and Education Committee, and in addition you were the first Chairman of the Disciplinary Committee, and it was thanks to your foresight and your ability that that most important Committee got safely through its teething troubles. It is a fact, I think, that it can be said with truth that the artist has captured your expression at a Disciplinary Committee meeting when you were dealing with somebody who had called forth your displeasure!

"Over the main staircase in this College there is a portrait of George Fleming, who was President for four momentous years, because it was during that time that the first Act relative to the veterinary profession was passed, and I am glad to think that there will now hang on the walls of this Royal College, and will continue to hang, a picture of one who, as President, did equal service during equally momentous times.

"Mr. Howard Dawes, we are glad to have you here with us to-day. We miss you in our Council, and this picture which we are hanging on the walls of the Royal College, of which you have so long been an ornament, is but a small measure of our affection and regard for you."

In reply Mr. Dawes said:—

"This is a momentous moment in my life, and I little thought that I should ever be given the honour of such a presentation portrait.

"You, Mr. President, have picked on probably some of the highlights of my career, but throughout my membership of the Council the thing that I most treasured and I appreciate so much to-day is the friendship and goodwill of my colleagues. You, Sir, have referred to those difficult years when I had the honour of occupying the Presidential Chair. They were difficult years. I feel I am only saying the truth when I say that years like that leave a mark upon a man, if not outwardly, at least, inwardly. Momentous decisions were about to be taken. Friendships of many years suffered: some were lost, some were injured, but as the shouting and the tumult die I think you have quite rightly pointed out that the pattern of things to come is beginning to assume a clearness which is satisfactory to all of us who were engaged in the work at that time. Next week we see another foundation stone of veterinary education being laid, and I look with the very greatest of pleasure upon this occasion and events.

"I do not think that at such a time as this it would be right and proper if I did not thank my wife for all the assistance that she gave to me. Without her I could not have devoted the time to the work that I did, and also without the valuable assistance of my younger colleagues in my practice: they all maintained an even serenity for me, and by that maintenance I was enabled, I think, to do my work.

"I am lucky, Mr. President and gentlemen, because this Royal College has seen fit to grant me this honour while I am alive. So many times a man is honoured when he cannot appreciate it, but I would like to say, from the bottom of my heart, Sir, and to you, my friends, how very much I appreciate to-day."

After the ceremony Mr. Dawes entertained the Council to luncheon at the Russell Hotel. In addition to those present for the ceremony there were present also Mr. G. P. Male and Major J. J. Dunlop, a Vice-President and Honorary Secretary respectively of the Victoria Veterinary Benevolent Fund.

News and Comment

UNIVERSITY NEWS

London

A meeting is to be held at the Royal Veterinary College, London, on Friday, November 11th, at 3 p.m. to discuss the inauguration of an Old Students Society and to appoint essential officers. The date has been chosen to coincide with the Commemoration Ball of the Royal Veterinary College Students' Union Society, and it is hoped that old students attending the afternoon meeting will be able to remain for the function in the evening.

THEN AND NOW

From time to time we endeavour to entertain our readers with quotations from the leading articles published in this journal during its early years. The extracts printed below are from the year 1889.

Minutes of Council Meetings (first verbatim report published)

Comparing our report (of the R.C.V.S.) with the official ones hitherto presented, a most striking difference is apparent. Each speech exhibits the individuality of the speaker, whereas when officially edited there is a sameness and conventionality that robs them of nearly all their interest. Our report is practically verbatim and affords us an opportunity of forming a tolerably correct judgment on the manner in which our Council Meetings are conducted and gives some idea of who talks, who acts, and who does neither. Some slight expressions in the report suggest to us the existence in the Council of a misplaced feeling of sensitiveness—a remnant from the time when the Council was a sort of quiet family party, each member of which was morbidly afraid to wound the feelings of any other member. We notice that one member when mildly drawing attention to the important matter of the legality of an appointment thought it necessary to assure the Council he "had no feeling in the matter." One cannot help suspecting a little mental flabbiness in a Body, the members of which are so sensitive and deferential!

Advertising

To say that advertising is "ungentlemanly" requires a lot of evidence to prove. It is freely indulged in by actors and singers, by publishers and authors, against whom no complaint is made. To say it is "unprofessional" is a more difficult accusation to meet. It is said a tradesman has a perfect right to advertise his goods but a professional man does not sell his goods and therefore should not advertise. Some years ago, a Sheffield cutler commenced to advertise, and his confrères were so disgusted at his behaviour that they turned him out of the club. He continued his evil practices, made a fortune, and then, like all other successful men, was discovered to be a great and good man, whom it was right not only to acknowledge, but even to toady to.

Animals Division

The Animals Division—whose duty is the suppression of disease—consists of Major Tennant (disguised under the title "Principal") and 50 travelling inspectors. For three years this shocking burlesque has existed and naturally their work has been unsuccessful. It has been attempted to bolster up the title "Animals Division" by the assertion that it had many duties in connection with animals other than those of controlling disease. Now what are they? The traffic in animals by ship or rail is regulated by the Board on sanitary grounds. The work in relation to weighing of cattle would not occupy one clerk one hour a week; and other duties there are none, save of a clerical nature. We shall probably never know the true history of the move which substituted an Animals Division for a veterinary department, and if the re-transfer is made we shall never trouble to enquire.

R.S.H. LECTURE

The Royal Society of Health Benjamin Ward Richardson Lecture, which is to be entitled "The Contribution of Abattoirs to Knowledge of Animal Disease and its Prevention" will be given this year by Professor E. G. White, who holds the Chair of Veterinary Preventive Medicine at Liverpool University. The lecture will be delivered on December 7th at 2.30 p.m. at the Society's headquarters, 90, Buckingham Palace Road, London, S.W.1.

HEALTH CONGRESS

The President of the Veterinary Hygiene Section of the 1956 Congress of the Royal Society for the Promotion of Health (formerly the Royal Sanitary Institute) will be Mr. R. E. Glover, Principal of the Royal Veterinary College. Professor H. Burrow, also of the Royal Veterinary College, will be the Recording Secretary.

The Marchioness of Reading will preside over the Congress which is to be held at Blackpool from April 24th to 27th.

CONFERENCE ON PROTOZOAN DISEASES

A conference having as its title, "Some Protozoan Diseases of Man and Animals: Anaplasmosis, Babesiasis and Toxoplasmosis" will be held under the auspices of the New York Academy of Sciences, Section of Biology, on November 17th and 18th, at the Barbizon-Plaza Hotel, New York. The Chairman of the Conference will be Professor Clarence R. Cole of the Ohio State University.

Most of the speakers have been chosen from among the teaching staffs of various American Universities, but among the few European representatives will be Dr. James Carmichael, C.M.G., of Ongar, Essex, a distinguished contributor to the columns of this journal.

MR. J. N. RITCHIE HONOURED

At the Quarterly Meeting of the Council of the Royal College of Veterinary Surgeons held on October 14th, 1955, the President presented to the Chief Veterinary Officer of the Ministry of Agriculture, Fisheries and Food, Mr. J. N. Ritchie, C.B., B.SC., D.V.S.M., the Diploma of Fellowship of the Royal College of Veterinary Surgeons by election. This Diploma can be awarded by the Council to members of not less than 20 years standing; only two such Fellows may be elected in any one year on "account of their special eminence in Veterinary Science." Only 10 members have been so elected since the 1932 Charter, which gave this power to the College, was granted. The Diploma of Fellowship by election is generally regarded as the highest award the Royal College can make to members of the profession.

LADIES' GUILD OF THE V.V.B.F.

We are advised that the following officers have been elected for the ensuing year:—

President, Mrs. T. Ritchie, London; *Vice-President*, Mrs. D. McNabb, M.P.; *Hon. Treasurer*, Mrs. D. I. Glover; *Hon. Auditor*, Professor T. J. Bosworth, *Hon. Secretary*, Mrs. Hill-Owens.

FRENCH CORRESPONDENT

The 14-year-old daughter of a French veterinary surgeon would very much like to correspond with the daughter of an English veterinary surgeon so that each has practice in writing the language of the other. It is suggested that if this can be arranged during the winter and spring, the two girls might visit each other in the summer.

Will any member whose daughter is interested kindly inform the General Secretary of the B.V.A.

DISEASED MEAT

Our readers may be interested in the following case, the details of which are quoted from a Welsh newspaper.

Messrs. Weeks (Brynmawr), Ltd., a company of meat suppliers, of Bailey Street, Brynmawr, were fined £25 at Abertillery Magistrates Court.

They had been brought into the proceedings by an Abertillery butcher, Fred Willcocks, of Tillery Street, who was accused of having in his possession for sale meat which was unfit for human consumption. Willcocks was fined £5. Both defendants admitted the offences.

Prosecuting for Abertillery Urban Council, Mr. Gareth Griffith said when one of the council's sanitary inspectors visited Willcocks's shop he found part of a pig carcase infected by tuberculosis. Willcocks, said Mr. Griffiths, had brought the company into the proceedings as suppliers of the meat.

Mr. Davies, defending, said that until January last year supplies of meat were controlled by the Ministry of Food. During the control period a system of meat inspection at the slaughterhouse was carried out by local authorities, including Abertillery.

In January that system was withdrawn and caused the company some concern. In an endeavour to get an adequate inspection they contacted local authorities and even the Ministry of Health. They offered to pay part of the salary of a sanitary inspector. They did not employ one of their own because they felt that the public might not have confidence in him.

Referring to the meat found in Willcocks's shop Mr. Davies said there were no visible signs of infection. He asked the Bench to treat the offences as technical breaches.

Announcing the decision, Dr. W. F. Mulver (chairman) said the magistrates regarded the cases as serious ones. The public had to be protected. Even though the meat inspection system broke down, the ultimate responsibility of inspection was the company's.

[It might be suggested that morally, at least, the Brynmawr local authority are open to blame also for not having an effective meat inspection service.—*Editor.*]

PERSONAL

Births

RUTTER.—On September 14th, 1955, to Jenny (*née* Ibbetson) and Peter Rutter, 20, Barton Hill, Shaftesbury, a son, Christopher David.

VAUGHAN.—On October 25th, 1955, at the Battle Hospital, Reading, to Margaret, wife of L. C. Vaughan, M.R.C.V.S., of Vine Cottage, Streatley, Berks, a daughter.

Marriage

COLLINSON—WARD.—At St. Peter's Church, Petersfield, on October 29th, 1955, Richard Jeffreys Hampton Collinson, M.A., B.C.L., of Liverpool, to Gwendolen Hester Ward, M.R.C.V.S., of Petersfield, Hampshire.

COMING EVENTS

November

8th (Tues.). Ordinary General Meeting of the Society of Practising Veterinary Surgeons at the Bell Hotel, Leicester, 2.30 p.m.

9th (Wed.). Meeting of the A.V.T. & R.W.'s, Scottish Regional Group, in the Royal (Dick) School of Veterinary Studies, 2.15 p.m.

Ordinary General Meeting of the Sussex Division, B.V.A., at the Old Ship Hotel, Brighton, 2.30 p.m.

General Meeting of the Lancashire Division, B.V.A., in the University Veterinary Hospital, Pembroke Gardens, Liverpool, 2.30 p.m.

11th (Fri.). General Meeting of the Yorkshire Division, B.V.A., in the Hotel Metropole, Leeds, 2.30 p.m.

The Royal Veterinary College Students' Union Society Commemoration Ball at the Royal Veterinary College, Camden Town, N.W.1, 8 p.m.

15th (Tues.). General Meeting of the South-east Midlands Division, B.V.A., at Franklin's Garden Hotel, Northampton, 8 p.m.

17th (Thurs.). Annual Dance of the Victoria Veterinary Benevolent Fund, County of Ayr, Ladies Guild at Western House, Ayr.

General Meeting of the Midland Counties Division, B.V.A., at the Birmingham Medical Institute, 154, Great Charles Street, Birmingham, 2.30 p.m.

General Meeting of the South Eastern Division, B.V.A., at the Royal Star Hotel, Maidstone, 2.30 p.m.

18th (Fri.). Annual General Meeting of the Scottish Branch, B.V.A., in the Royal (Dick) School of Veterinary Studies, Edinburgh, 2.30 p.m.

December

5th (Mon.). Annual Dinner of the Centaur Society, University of Bristol, at the Hawthorn's Hotel, Bristol, 7 p.m.

R.C.V.S. EXAMINATIONS

November 7th, Monday.—Pharmacology, etc. Examination (Revised Syllabus). Oral and Practicals (London and Dublin).

November 9th, Wednesday.—Animal Management Examination, Dublin.

December 8th, Thursday.—M.R.C.V.S. Written Examinations.

December 9th, Friday.—M.R.C.V.S. Written Examinations.

December 12th, Monday.—M.R.C.V.S. Practical and Orals commence (Panels " A " and " B ").

ADDRESSES OF DISEASE INFECTED PREMISES

The list given below indicates, first, the county in which are situated the premises on which disease has been confirmed, followed by the postal address and date of outbreak.

Anthrax

Berwick. Polwarth Crofts, Greenlaw (Oct. 28).

Cumberland. Beckses Farm, Penruddock, Penrith (Oct. 28); East Farm, Southerfield, Abbeytown, Carlisle (Oct. 31).

Derby. Lethersley Farm, Sudbury (Oct. 25); The Cottage Farm, Sandybrook, Ashbourne; Oldhams Farm, Middleton, Bakewell (Oct. 27); Gorse Hill Farm, Parwich Ashbourne (Oct. 28); Carr Wood Farm, Brackenfield (Oct. 31).

Durham. Little Eppleton Farm, Hetton-le-Hole (Oct. 29).

Flints. Tyn-y-Pystill Farm, Bagillt (Oct. 31).

Kirkcudbright. Cairniehill Farm, Borgue (Oct. 27).

Lancs. Tarn House Farm, Jepps Lane, Barton, Preston; Old Hall Farm, Old Hall Lane, Worsley, Walkden, Manchester (Oct. 28).

Peebles. Blaircochrane Farm, West Linton (Oct. 25); Burnfoot Farm, Broughton Biggar (Oct. 26).

Salop. The Croft, Queenshead, Oswestry (Oct. 25); 15, Crudgington Green, Wellington (Oct. 26).

Staffs. Yew Tree Farm, Yarnfield, Stone; 56, Holding, Marston Lane, Yarlet; Ranton Hall Farm, Ranton (Oct. 31).

Sussex. Gotely Farm, Northiam (Oct. 31).

Westmorland. Elm House Farm, Bolton, Appleby (Oct. 31).

Wilts. Barrow Farm, Langley Burrell, Chippenham (Oct. 25); Oare Pennings Farm, Pewsey, Marlborough (Oct. 28).

Yorks. Grange Farm, Keyingham, Hull; Holme House Farm, Malham, Skipton (Oct. 25); Whintofts, Red Yatts Lane, Pickering (Oct. 31).

Atrophic Rhinitis

Herts. Old School Farm, Broxbourne (Oct. 26).

Fowl Pest

Lancs. Hall Green Farm, Hall Carr Lane, Longton, Preston (Oct. 26); Longlands Farm, Bank Bridge, Tarleton, Preston (Oct. 28).

Norfolk. Fen Farm, Carlton Rode, Norwich (Oct. 25); Lord Nelson Public House, Yaxham, Dereham; Post Office, North Tuddenham, E. Dereham; The Cottage, Plantation Road, Aslacton, Norwich (Oct. 27); Mill Road Farm, North Tuddenham, East Dereham; Paper Street, Yaxham (Oct. 28); The Garage, Stokesby, Great Yarmouth; Brookwell Poultry Farm, Tharston, Norwich; Nivelle Farm, Forncett St. Peter, Norwich (Oct. 29); Windybray, Paper Street, Yaxham (Oct. 30); Low Road, North Tuddenham, East Dereham; Burgh Farm, Mattishall, East Dereham (Oct. 31).

Oxford. Westfield Farm, Weston-on-the-Green, Bicester (Oct. 26).

Swine Fever

Ches. Ball Farm, Hankelow, Crewe (Oct. 31).

Devon. Millway Farm, Alston, Axminster (Oct. 28).

Dorset. Eastlands Farm, Wheelers Lane, Knighton, Canford Magna, Poole (Oct. 31).

Essex. Hardings Farm, Ingatestone (Oct. 25); Little Blunts Farm, Billericay (Oct. 26); Appletrees Farm, Hartford End, Chelmsford (Oct. 28).

Lancs. Warren Farm, Ainsdale, Southport (Oct. 28).

Lanarks. 15, Holding, Cochno, Hardgate, Duntocher, Glasgow; The Piggery, Bridgeholm, Strathaven (Oct. 31).

Leics. Hill Farm, Walton-on-the-Wolds, Loughborough (Oct. 26); Swingbridge Farm, Loughborough (Oct. 29).

Lincs. Ash Grove, Sutton St. James, Spalding (Oct. 26).

Norfolk. Rose Lea, Green Lane, Mundford, Thetford (Oct. 31); New Road Premises, Upwell, Wisbech (Nov. 1).

Oxford. South Street, Steeple Aston (Oct. 27).

Pembroke. The Piggeries, Jefferson Walls, Angle (Oct. 26).

Somerset. Southdown, Shepton Montague, Wincanton (Oct. 31).

Warwicks. Cliffe Allotments, Old Milverton, Leamington Spa (Oct. 26); Pevensey Meadow Farm, Hatton (Oct. 28); Hogbrooke Farm, Bishops Tachbrook, Leamington Spa (Oct. 31).

Worcs. Woodlands Farm, Coopers Hill, Alvechurch (Oct. 25); Whitlenge Farm, Hartlebury, Kidderminster (Nov. 1).

Yorks. Worrall Hall, Worrall, Sheffield (Oct. 25); Moat Hill Farm, Howden Clough; Keepers Cottage, Bishop Barton, Beverley (Oct. 26); Foxfield Farm, Kirkhamgate, Wakefield (Oct. 31).

CORRESPONDENCE

The views expressed in letters addressed to the Editor represent the personal opinions of the writer only and their publication does not imply endorsement by the B.V.A

OPENING OF CONGRESS

Sir,—May I take the earliest opportunity to thank Mr. Halpin for his letter in your last issue. I want to assure him, and, I believe, many others of like mind, that his suggestion—that we devote a short period to asking for spiritual guidance at the opening of our Congress next year—is the earnest wish of,

Yours faithfully,

E. WILKINSON.
President of the B.V.A.

Saxelby House,
216, Osmaston Road,
Derby.

November 1st, 1955.

Sir,—May I, as a convinced if mediocre Christian, lend my support to Mr. Halpin's suggestion that future B.V.A. Congresses should open with an interval for private prayer.

May I also express my thanks to the Editor of THE RECORD for publishing this letter.

To see such views in print is like a gust of clean air among all the choking foulness of the modern world.

Yours faithfully,

A. L. BONGARD.

M.M.B. Cattle Breeding Centre,
Calthwaite,
Penrith,
Cumberland.

October 29th, 1955.

MAN'S INTERFERENCE

Sir,—Thank you, Mr. Pollock. It is very disconcerting to be interrupted in the middle of discourse by, "You have two minutes." If the chairman gives notice that the discussion is limited to five minutes, then the gavel should fall at the end of that time but it should be left to the good sense and good manners of the speaker not to exceed his time allowance.

However, for the immature, a professional standard in any shape or form must wait upon the assimilation of the progress in scientific knowledge. It is to be regretted, to judge by the paucity of discussion *of the subject*, that immaturity is so much to the fore. My sympathies are all with Dr. Taylor who provided the food for so much discussion.

I hate the use of anonymity, but in this case, after Man's Interference with Nature and Man's Interference, I beg to subscribe myself,

Yours faithfully,

"MAN."

October 23rd, 1955.

A USEFUL APPARATUS

Sir,—A modification of Guhr's diaphragm for intravenous injections has proved of value in small-animal practice. Guhr's diaphragm consists of a Record fitting nozzle which leads to a metal tube ending in a removable rubber diaphragm. The tube has small wings which, in the human patient, are used to secure the device to the patient's arm with adhesive tape. In the modified pattern these wings are replaced by flat, flexible metal arms, each ending in a hook. In use the metal arms bend to fit the patient's limb and are joined by a rubber band which holds the instrument securely in position. After an initial intravenous injection further injections may be made through the rubber diaphragm using a second needle. As the needle and adaptor are filled with the injection fluid and not with blood, the needle does not become blocked by a blood clot.

Plastic tubing which will withstand boiling is available in a form useful for the storage or transport of sterile instruments. The tubing is made in varying diameters from half an inch upwards. Instruments can be sterilised in the tubing and transported without risk of contamination. The ends of the tubing are sealed to form a closed bag by passing through a flame or, less permanently, by twisting and securing with a rubber band. The transparency of the material permits the contents of the bag to be seen.

I am indebted to Mr. A. Tellford Slater, of Messrs. Cox (Surgical) Ltd., of Coulsdon, for his assistance in modifying the Guhr adaptor and for bringing the plastic tubing to my notice.

Yours faithfully,

G. W. SERTH.

102, Brighton Road,
Purley,
Surrey.

October 29th, 1955.

CEREBRO-SPINAL FLUID IN ENCEPHALITIS IN DOGS

Sir,—In THE VETERINARY RECORD of October 15th, 1955, there was a report of some discussion about the significance of the cerebro-spinal fluid in encephalitis in dogs.

The distemper complex is in some respects analagous to anterior poliomyelitis in man, in which the causal agent is also a neurotropic virus and in which there is an increase in the pressure of the cerebro-spinal fluid and, initially, severe head- and back-ache.

It would appear from Mr. Singleton's remarks that reduction of c.s.f. pressure while effecting marked improvement in some dogs was of no value in others. Is it not possible that in those dogs benefiting from the treatment, the fall in c.s.f. pressure resulted in relief from severe head-ache and that in those dogs showing no improvement there was brain damage of a permanent nature? What, in fact, is the normal c.s.f. pressure in the dog? Dukes states that pressures of 110 to 120 mm. Ringers solution are common in anaesthetised dogs. Mr. Singleton considers a rise from 4 mm. to 18 to 40 mm. water to be great.

Mr. Bateman suggests that 10 c.c. of c.s.f. be withdrawn by lumbar puncture. What is the normal amount in the dog? In man there is only 60 to 80 c.c. Mr. Bateman is also reported as saying that much of the pressure is in the lumbar region. Surely in such a system the pressure is almost the same throughout.

It would seem to me to be a very hazardous method of treatment considering not only the paucity of normal data but also the dangers inherent in the technique: if stretching the meninges causes pain, then any large change in the pressure of the c.s.f., positive or negative, relative to the pressure of the brain substance will cause pain.

Yours faithfully,

H. E. CARTER.

121, Broadfield,
Harlow,
Essex.

October 18th, 1955.

Reference

DUKES, H. H. "The Physiology of Domestic Animals," 6th edition.

BLACKTONGUE

Sir,—In his clinical note on the successful application of nicotinic acid in a case of suspected blacktongue in a sheepdog (*Vet. Rec.*, **67**, 790) Mr. Lionel A. Hemsley quotes me as having stated (*Brit. Vet. J.*, **109**, 30) that in Scotland the incidence of blacktongue in sheepdogs is estimated at 11 per cent.

I find that the text in question is as follows:—"Blacktongue is reported as occurring in 21 of the 194 Scottish returns—say 11 per cent.—but I have reason to believe that the real incidence is even higher."

By this was meant that at least 11 per cent. of the Scottish shepherds who returned answers to my questionnaire had experienced the occurrence of blacktongue in their dogs at one time or other; it does not refer to the percentage incidence of the disease in Scottish sheepdogs.

I now realise that my text does not carry precisely the meaning it was intended to express and I am glad to take this opportunity of correcting any misunderstanding to which it might give cause.

Yours faithfully,

J. RUSSELL GREIG.

Wedderlie,
Kirk Brae,
Liberton,
Edinburgh, 9.

October 25th, 1955.

ELECTRICAL STUNNING AND HUMANE SLAUGHTERING OF ANIMALS

Sir,—Rabbi Sassoon asks for details of statements, in his book on electrical stunning, which I consider have been taken out of their context so that they no longer convey the author's original meaning. The references which I give below refer to the second edition of "A Critical Study of Electrical Stunning and the Jewish Method of Slaughter."

i. On page 15, paragraph 4, Roberts's work is quoted thus: "there are no grounds for supposing that the shock itself produces directly any loss of consciousness in the animal." Roberts was referring to an electric circuit in which the current did not pass through the brain of the dog. Results of this procedure have no bearing on the proposed stunning for shechita when the current would be specifically passed across the brain.

ii. In the scientific appraisement included in the book, in paragraph 3, the following appears: "no significant change in the pattern of the EEG occurred until about 12 seconds from the beginning of the shock." This statement also applied to the circuit in which electricity does not pass through the brain; therefore the finding has no bearing on the proposed procedure for shechita.

iii. On page 18, paragraph 4, Hickman's paper on the Elther apparatus is mentioned and the following two pages are devoted to disparagement of the apparatus with numerous quotations from private correspondence with Dutch workers. Hickman's conclusions are ignored; these referred to (a) onset of unconsciousness; (b) bleeding out; (c) damage to carcase; (d) general advantages and are summed up finally thus: "It would appear to be the ideal method of rendering animals unconscious prior to ritualistic slaughter."

Rabbi Sassoon in his foreword pleads that "the question raised by this booklet may be impartially examined and maturely weighed." Thus far he and I are in agreement, and I hope that this correspondence may help in the fulfilment of his wish.

Yours faithfully,

PHYLLIS G. CROFT.

Fairmead,
High Beech,
Loughton,
Essex.

October 25th, 1955.

ADVERTISERS' ANNOUNCEMENTS

ALLEN & HANBURYS LTD. announce the introduction of Dapsyvet Pessaries.

Dapsyvet Pessaries contain chloramphenicol and dapsone in a urea base and are indicated for the treatment of metritis, pyometra and associated conditions in cows, ewes and mares.

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EVANS MEDICAL SUPPLIES LTD. announce that following upon the adoption of an international standard for Hyaluronidase, Evans Medical Supplies Ltd. announce that Rondase contains 1,000 i.u. Hyaluronidase in each 3 mg. vial.

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